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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,509	06/11/2001	Michael L. Haile	14073	4071

7590 07/22/2003  
THEODORE J. BIELEN, JR.  
Bielen, Lampe & Thoeming  
Suite 720  
1990 N. California Blvd.  
Walnut Creek, CA 94596

EXAMINER
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RAJGURU, UMAKANT K

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 07/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/879,509

Applicant(s)

HAILE, MICHAEL L.

Examiner

Umakant K. Rajguru

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 33-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. An RCE (Paper No. 7) and a preliminary amendment (Paper No. 8) have been filed on May 25, 2003.
2. Claims 33-39 are presently under examination.
3. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 33-38 have been renumbered 34-39.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 33-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt J (USP 6071325) in view of Roe et al (USP 4751259) and West et al (USP 5459181).

Schmitt discloses a binder composition and a process for agglomerating particulate material (abstract; col. 2, lines 44-61). Particulate material is mixed with a binding effective amount of a water-soluble polymer and caustic. Water-soluble polymers include starch, guar gum, lignin etc, polyacrylamides, polyacrylates and

copolymers thereof (col. 3, line 54 to col. 4, line 7). Amounts of polymer and caustic are set forth in col. 5, lines 29-33. Composition may include polysaccharides (col. 5, lines 47-65).

Schmitt does not mention his invention as being directed to a "tackifier". It is noted that though instant invention is named as a "tackifier", it is directed to a composition, which is sprayed on certain area to control (by agglomeration) particulate matter (see specification, page 3, lines 17-20). Schmitt teaches the same objective by his invention.

Schmitt does not mention sodium borate, sodium metaborate etc. (of instant claim 33), surfactant (of instant claim 38) and fiber (of instant claim 39).

Roe discloses compositions for iron ore agglomeration. Such a composition comprises (a) an emulsion of vinyl addition polymer, (b) a polysaccharide, (c) a surfactant and (d) borax (col. 1, lines 31-40).

West discloses a hydraulic binder composition (abstract). The composition comprises a polymer, an amine-formaldehyde condensate and a catalyst (col. 3, line 59 to col. 4, line 7). Also added to the composition are fibers (col. 5, lines 26-47).

Hence, it would have been obvious to add to the composition of Schmitt, borax and surfactant (of Roe), as well as fibers (of West) because (1) borax improves formation of more pellets in the correct size range and also increases dry strength of pellets and (2) fibers impart a high degree of resistance (to wind and erosion) to the composition after it is applied by spraying.

On page 4 of Paper No. 8, the applicant states "Schmitt hardening caustic is not compatible with living entities". This statement is not persuasive in absence of some supportive evidence. Incidentally, Schmitt uses a very small amount i.e. 0.01% caustic (see col. 11, line 65).


As regards Roe, the applicant points out on page 5 that "Roe states that blends of dry acrylamide-based polymers with starch do not work". This statement is not persuasive because, Roe is a secondary reference relied upon for its teaching of use of borax and surfactant, which can be added to the composition of Schmitt. Composition of Schmitt is not a dry mixture. It contains water.


Instant claims are open-ended due to "comprising". Therefore there is no need to remove caustic of Schmitt. Caustic can still be present and borax can be added to the composition. Contrary to what the applicant asserts, composition resulting from the combination of Roe and Schmitt can still have natural organic material (originally present in composition of Schmitt). Hence combining the teachings of secondary reference with that of primary reference renders above claims obvious.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to U. K. Rajguru whose telephone number is (703) 308-3224. The examiner can normally be reached on Monday-Friday from 9:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
U.K. Rajguru/dh  
July 21, 2003

  
James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700